

Work Order ID 149748

Thursday, July 28, 2016 8:38:57 AM

149748

Page 1

Item ID: D2646

Revision ID:

Item Name: Aft Cap

Start Date: 8/2/2016 Start Qty: 50.00

Required Date: 8/23/2016 Req'd Qty: 50.00

Reference:

Accept

DAS

13

9-89

N900040100

Setup Start ***NS1***

Stop ***NS2***

Cust Item ID:

Customer:

Approvals: Process Plan:

QC:

DAS

21

9-89

Date: JUL 28 2016

Date:

Tooling:

SPC (Y/N):

Date:

Date:

Run Start ***NR1***

Stop ***NR2***

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID Tool # Plan
Code Accept Reject Reject Insp.
Qty Qty Number Stamp

Draw Nbr

Revision Nbr

D2646

Rev C

100

100

Purchasing

Purchasing

PURCHASING

Memo

Issue P/O: 33216 1-Spin as per Dwg D2646 2-Material release
note required
Vendor: Sieg's Manufacturing

0.00

0.00

38

AUG 03 2016

DAS

13

9-89

110

110

Packaging

Packaging

Receive & Inspect for Damage & Mat'l Certs

Memo

Ensure Material Release Note is attached

0.00

0.17

38x 80169-12

120

120

QC

Quality Control

QC6- Inspect dimensions to drawing

Memo

0.00

0.00

DAS

16

9-89

140113

Work Order ID 149748

Thursday, July 28, 2016 8:38:57 AM

149748

Page 2

Item ID: D2646

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Aft Cap

Start Date: 8/2/2016 Start Qty: 50.00

50

Cust Item ID:

Required Date: 8/23/2016 Req'd Qty: 50.00

50

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start ***NR1***

QC:

Date:

SPC (Y/N):

Date:

Stop ***NR2***Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

130

0.00

130

Small Fab

Small Fab

Memo

0.42

1-Drill using DT8026 as per Dwg D2646.2-Open holes to .297 as per Dwg
D2646.3-Deburr

38x

DAS
36
16/09/27

140

QC5- Inspect part completeness to step on W/O

0.00

140

QC

Memo

0.17

Quality Control

38

DAS
38
9-89
SEP 28 2016

150

Chemical Conversion Coat per QSI005 4.1

0.00

150

HandFinish

Memo

0.17

Hand Finishing

38

2016/09/28
BEB

Work Order ID 149748

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149748

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Item ID: D2646

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Aft Cap

Start Date: 8/2/2016 Start Qty: 50.00

50

Cust Item ID:

Required Date: 8/23/2016 Req'd Qty: 50.00

50

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start ***NR1***

QC:

Date:

SPC (Y/N):

Date:

Stop ***NR2***Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run HoursTool ID Tool # Plan
CodeAccept Reject Reject Insp.
Qty Qty Number Stamp

160

White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum

0.00

160

Powdercoat

Powder Coating

Memo

START TIME:

FINISH TIME:

OVEN TEMPERATURE:

38 ϕ 1609-28. DAS 34 9-89

170

QC3- Inspect Part Finish

0.00

170

QC

Quality Control

Memo

0.08

38x ϕ 16109/28 DAS 15 9-89

180

Small Fab

0.00

180

Small Fab

Small Fab

Memo

Install inserts as per Dwg D2646

0.25

38x ϕ 16109/28

Work Order ID 149748

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149748

Page 4

Item ID: D2646

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Aft Cap

Start Date: 8/2/2016 Start Qty: 50.00

50

Cust Item ID:

Required Date: 8/23/2016 Req'd Qty: 50.00

50

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start ***NR1***

QC:

Date:

SPC (Y/N):

Date:

Stop ***NR2***Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run HoursTool ID Tool # Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

190

QC5- Inspect part completeness to step on W/O

0.00

190

QC

Memo

0.17

Quality Control

38 φ 16-09-28. DAS 34 9-89

200

Identify as per dwg & Stock Location: FP-001

0.00

200

Packaging

Memo

0.08

Packaging

LOCATION : FP001

x38 d 16/09/28

210

QC21- Final Inspection - Work Order Release

0.00

210

QC

Memo

0.83

Quality Control

DAS
21
9-89

SEP 2 9 2016

2em 16/09/28

Picklist Print

Thursday, July 28, 2016 8:38:56 AM

Page 1

Work Order ID: 149748

149748

Parent Item: D2646

D2646

Parent Item Name: Aft Cap

Start Date: 8/2/2016

Required Date: 8/23/2016

Start Qty: 50.00

Required Qty: 50.00

Comments: IPP: G05.08.22Hole size revised in Step 5KJ/JLM
IPP Rev:H Changed Inserts 07-02-19 JLM
IPP rev I changed inserts 07.06.11 EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
ALS7-1032-130	AELS8-1032-130	Purchased	No			110	Each	1,262.000	2	100	76		
AI S7-1032-130										**			
Rivnut													

Location

Loc Qty

Loc Code

FG

100

M128649

100

FP001

13

M128649

13

st549

1149

M128649

1149

D2646P

Purchased

No

180

Each

0.0000

1

D2646P

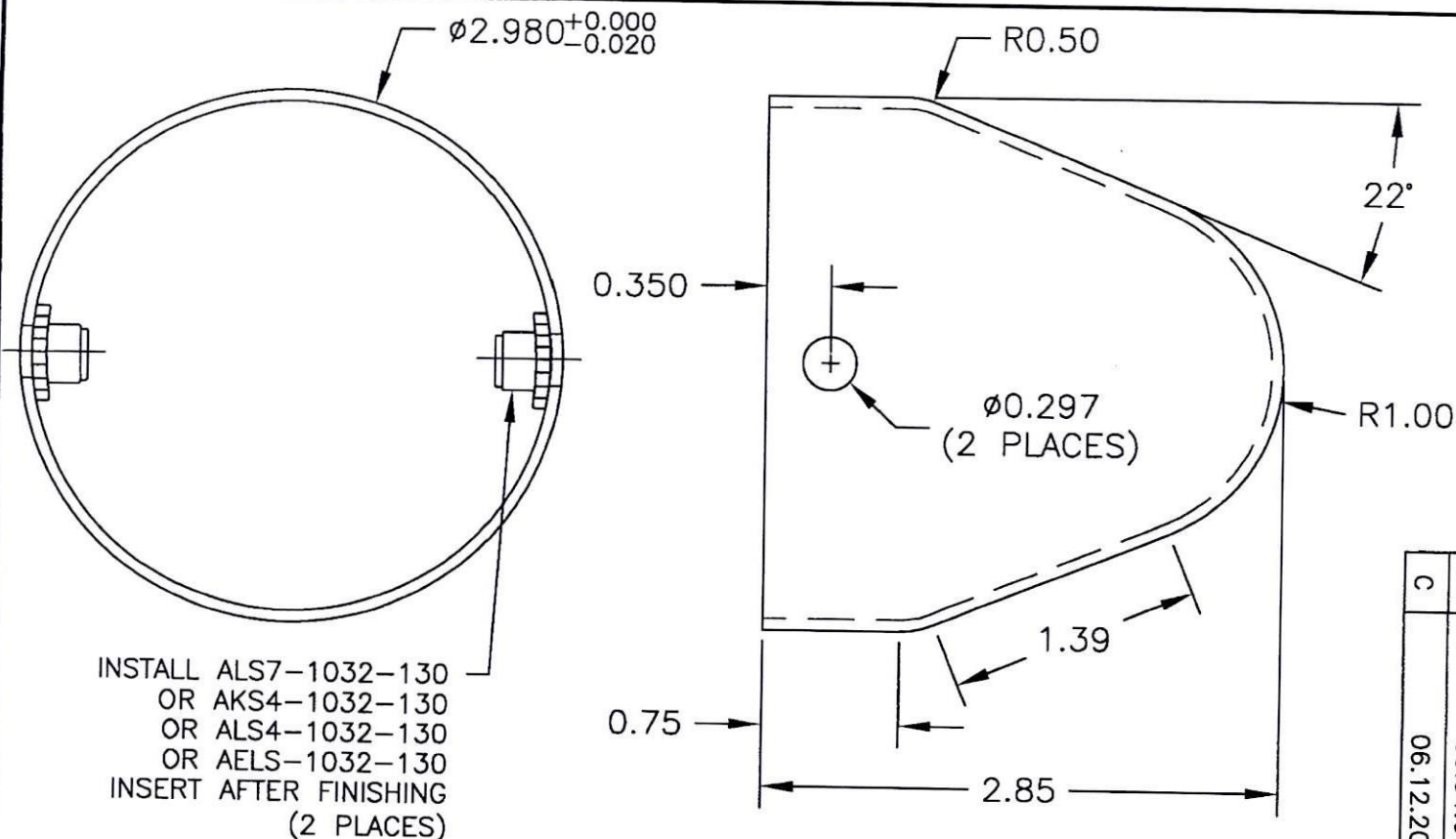
Aft Cap

**

50 38x
38x SP
16 9-12



DESIGN	DS	DRAWN BY	DART AEROSPACE USA, INC.
CHECKED		APPROVED	PORT HADLOCK, WA
DATE	06.12.20	D2646	REV. C
		TITLE	SHEET 1 OF 1
A	97.03.25	AFT CAP	SCALE 1:1
B	05.04.01	NEW ISSUE	
C	06.12.20	CHANGE TO CLOSED INSERTS	
		CHANGE TO OPEN ENDED INSERTS	



D2646 AFT CAP

- 1) MATERIAL: ALUMINUM 1100-O 0.063 THICK (QQ-A-250/1)
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
POWDER COAT ASSEMBLY WHITE (4.3.5.1) PER DART QSI 005 4.3
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER

NO. 149748 MJS

160728



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID PO33216

Purchase Order Date 8/3/2016 10:55:55 AM
PO Print Date 8/4/2016

Page Number 1 of 2

Order From :

VC-SIE001

Ship To : DART AEROSPACE LTD

SIEG'S MANUFACTURING LTD.
6236 - 205 STREET
LANGLEY, BC V2Y 1N7
CA

1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

E-MAILED

AUG 04 2016

Contact Name

Vendor Phone 604 530 7455

Ship To Contact

Ship To Phone

Ship Via: FedEx Overnight collect

Ship Acct:

Buyer

Chantal Lavoie

Customer POID

Customer Tax # 10127-2607

Terms

Net 30

Currency

CAD

FOB

FCA - (Free Carrier)

Line Nbr	Reference Vendor Part Number	Description/ Mfg ID	Req Date/ Taxable	CD	Req Qty/ Unit of Measure	PO Unit Price	Extended Price
	Line Comments		Promise Date				
	Delivery Comments						

1	D2646P	Aft Cap	8/22/2016		50.00	\$6.70	\$335.00
			Yes		Each		
			8/22/2016				

AS PER DWG D2646 REV. C

B149748 x 38 PCS PAINT WHITE

B149817 X 12 PCS PAINT BLACK FOR ***PHI***

8/16-9-12.

Line Total:

\$335.00

3	71401-45	PROCUREMENT QUALITY CLAUSES	8/22/2016		1.00	\$0.00	\$0.00
---	----------	-----------------------------	-----------	--	------	--------	--------

No

Procurement Quality Clauses

8/22/2016

A005 right of entry

A012 chemical and physical test report

A016 personnel qualification

A017 raw material identification (as applicable)

A026 certification of material conformance

A041 quality management system

A042 dart notification by supplier

A043 retention of quality documents

Note:

8/4/2016



Sieg's Manufacturing Ltd.

Quality Metal Spinning and Metal Fabricating
6236 205 Street, Langley, B.C. Canada
Ph: (604) 530-7455 Email: accounts@siegsmf.com
www.siegsmf.com

Packing Slip

Packing Slip No.:

47317

Date:

09/08/2016

Page:

1

Sold to: DART AEROSPACE LTD. 1270 ABERDEEN STREET HAWKESBURY, ONTARIO K6A 1K7		Ship to: DART AEROSPACE LTD. 1270 ABERDEEN STREET HAWKESBURY, ONTARIO K6A 1K7	
Order No.: 33216		Sold By: LOWEY, ARLA	
Shipped By:		Ship Date: 09/08/2016	
Tracking No.:			

Item No.	Unit	Description	Quantity	Backorder quantity
D2646P ✓	Each	Aft Cap ✓	50 38x	
5016-9-12.				
Comment:				

**Sieg's Manufacturing Ltd.**

6236 205 Street Langley, B.C. Canada V2Y 1N7

Ph#: (604)530-7455 fax#: (604)530-7490

arlalowe@siegsfmfg.com

INSPECTION REPORT

Date: Sept 8, 2016

Customer: Dart AreospacePacking Slip: 47317

Part#:	Quantity	Material	Check holes	Insp. By.
D2646	50	14g 1100	N/a	AL

Notes:

Material Certification Attached: ____ YES ____



Skana Aluminum Co
Rolling Mill - Certified Metal
Certification of Properties and Analysis

Physical test: 11B224 Aluminum Alloy: 1100 Temper: -O- Thickness: .0630

Tested For: Copper and Brass Sales

6156 PO No: 5400200310-R01

Chemical	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Others	Al
Min Range	..	..	0.05	..	..	..	..	..	..	..	..
Max Range	.95 Si	+ Fe	0.20	0.05	..	..	..	0.1	..	0.05	..

Coil Ref. No.	1	2	3	4	5						
Tensile Strength KSI	14.10	14.06	14.04	14.06	14.14						
Yield Strength KSI	6.29	6.14	6.07	6.07	4.93						
% Elong. in 2 in.	30.80	30.40	30.70	31.30	32.30						

Coil Ref. No.											
Tensile Strength KSI											
Yield Strength KSI											
% Elong. in 2 in.											

Coil Ref. No.											
Tensile Strength KSI											
Yield Strength KSI											
% Elong. in 2 in.											

Coil Ref. No.											
Tensile Strength KSI											
Yield Strength KSI											
% Elong. in 2 in.											

Remarks: Tested By: RJD

Certified Date: 21 Nov 2013

Certified By
Lab Manager

RJD .063 X 48.000 MF 5/5

ITEM # ALFLR01243

MEETS/EXCEEDS ASTM B209-10 SPEC

BLANKS: COILS TO PRESSROOM

5106213

The Friday, November 21, 2013

Melted/Manufactured in USA

QF 824-1-1

Page 1 of 1

From: Copper and Brass Sales CA

Cust. SLEGS MANUFACTURING LTD.

CstAr

Wgt.: 1,109.542 LB

Del.: 2402875712

CstOr 1514

Date 12/19/2013

John R. Zambetti

A company
of ThyssenKrupp
Services

ThyssenKrupp Materials NA Inc.

ThyssenKrupp Materials NA
Copper and Brass Sales Division
19044 95A Avenue
SURREY BC V4N 4P2
Tel.: +16048823493 Fax: +16048820686



Order number	Ord-pos	Del-pos	Part description
Customer PO	PO date	Quantity	Customer Part
MTR header	MTR type	Search criteria	Heat lot
			Sample number
C8A/1401788868	000020	900001	1100 Aluminum - O Sheet 0.06300 X Width
1514	12/18/2013	74 ST	
Att_001.PDF	NCAP	930230267220130003	11A711
C8A/1401788868	000020	900002	1100 Aluminum - O Sheet 0.06300 X Width
1514	12/18/2013	26 ST	
Att_002.PDF	NCAP	930235185120130004	11B224

Delivery number

2402875712

Date

12/19/2013

SIEGS MANUFACTURING LTD.
6236 205 ST
LANGLEY V2Y 1N7
CANADA

Skana Aluminum Company

Rolling Mill - Certified Metal

Certification of Properties and Analysis

Physical test: 11A711 Aluminum Alloy: 1100 Temper: -O- Thickness: .0630
 Tested For: Copper and Brass Sales 6156 PO No: 5400197413-R01

Chemical	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Others	Al
Min Range	..		0.05	..	..	..	..	..	..		
Max Range	.95 Si	+ Fe	0.20	0.05	..	..	..	0.1	..	0.05	

1	13.28	4.34	31.80	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Others
				.17	.44	.10	.00	.00	.00	.00	.00	.01	.00

Al

99.20

2	13.38	4.25	31.90	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Others
				.17	.43	.10	.00	.00	.00	.00	.00	.01	.00

Al

99.20

3	13.44	4.46	32.70	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Others
				.17	.43	.10	.00	.00	.00	.00	.00	.01	.00

Al

99.20

4	13.55	4.68	31.40	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Others
				.17	.44	.10	.00	.00	.00	.00	.00	.01	.00

Al

99.20

5	13.31	4.47	30.30	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Others
				.17	.43	.10	.00	.00	.00	.00	.00	.01	.00

Al

99.20

Remarks: Tested By: RJD

Certified Date: 10 Oct 2013

Certified By:
Lab Manager

Kenna Hampton

RJD .063 X 48.000 MF 5/5

ITEM # ALFLR01243

MEETS/EXCEEDS ASTM B209-10 SPEC

BLANKS: COILS TO PRESSROOM

8 coils

This day, October 10, 2013

Melted/Manufactured in USA QF 824-1-2

Page 1 of 2

From: Copper and Brass Sales CA

Dist. SIEGS MANUFACTURING LTD.

CstAr

Wgt.: 3,157.927 LB

Del.: 2402875712

CstOr 1514

Date 12/19/2013

John P. Zambetti